and the common consequences were fractures and head injuries. The common bones fractured were the radius and ulna.

PIH2

E-PRESCRIBING REDUCES BEERS PRESCRIBING AMONG THE ELDERLY

Hutchins DS[1], Lewis M[2], Valezquez R[3], Berger JE[4]
[1]Caremark, Scottsdale, AZ, USA, [2]Caremark, Hunt Valley, MD, USA, [3]OSF HealthPlans, Peoria, IL, USA, [4]Caremark, Northbrook, IL, USA

OBJECTIVES: The objective of this study was to assess the impact of a PDA-e-prescribing tool (e-tool) on prescribing potentially inappropriate drugs from the Beers List to the elderly. The Beers List documents potentially inappropriate medications that should be avoided or used with caution in patients over the age of 65 years. **METHODS:** All prescription claims (N = 383,855) from April 2002 through June 2005 were extracted for 14,557 plan participants aged 65 and older in which 70 of 3706 prescribers received an e-tool. For each claim, we identified whether the prescription was new and a Beers listed drug and whether the prescriber was an e-tool user and a staff model physician. E-tool use was split into before and after initiation. New prescriptions were classified into 6 and 12-month variables using prior eligibility. Rates were determined as Beers claims counts divided by total claims. We ran chi-square tests and logistic regressions incorporating these and selected demographic variables. **RESULTS:** After initiating e-tool use, providers prescribed significantly fewer Beers drugs than before across all (7.87% vs. 9.13%, $p < 0.0001$) and new (6-month: 3.39% vs. 4.68%, $p < 0.0056$; 12-month: 3.05% vs. 4.78%, $p < 0.0025$) prescriptions; their before rates did not differ significantly from non-e-tool providers (overall: 9.09% vs. 9.13%, $p = 0.8702$; 6-month: 5.04% vs. 4.66%, $p = 0.5459$; 12-month: 3.05% vs. 4.78%, $p < 0.9317$). Staff providers prescribed significantly fewer Beers drugs overall than non-staff providers (8.88% vs. 9.27%, $p = 0.0002$), but not for 6-month (5.08% vs. 4.49%, $p = 0.0558$) or 12-month (4.97% vs. 4.69%, $p = 0.5816$) new prescriptions. Regressions, accounting for provider degree and specialty, participant sex and age group, and geography, yielded similar results. **CONCLUSION:** e-Tools providing Beers criteria can significantly reduce the prescribing of these drugs among the elderly. Such reductions have been shown to reduce morbidity, mortality, and health care costs.

INDIVIDUAL'S HEALTH—Cost Studies

PIH3

COST-EFFECTIVENESS OF ORAL AND TRANSDERMAL CONTRACEPTIVE METHODS

Gajria KL[1], Wallenstein GV[1], Hagan MA[2]
[1]QualityMetric Inc, Lincoln, RI, USA, [2]Berlex Laboratories, Inc, Wayne, NJ, USA

OBJECTIVES: The objective of this study was to identify the most cost-effective oral or transdermal contraceptives (CCs) using a provider perspective. **METHODS:** A decision analytic model was developed to compare the cost-effectiveness of oral CCs, 3 mg drospirenone/0.02 mg Ethinylestradiaol (DRSP-EE), 0.18 mg norgestimate/0.025 mg ethinylestradiol (NO-EE), and 1 mg norethindrone acetate/20 mcg ethinyl estradiol (NA-EE); transdermal CC 6 mg norelgestromin/0.075 mg ethinyestradiol (transdermal N-EE); and no contraceptive use in preventing a pregnancy per patient per year. Direct medical costs were based on average wholesale prices for drugs (Wolters-Kluwer, 2006), and, physician, laboratory and hospital costs based on 2006 Medicare reimbursement rates. Probability data that included compliance and pregnancy rates were extracted from randomized clinical trials and public resources such as the 2002 National Survey of Family Growth. A probabilistic sensitivity analysis of all free parameters was conducted through a Monte Carlo simulation. Key parameters were sampled from beta distributions. **RESULTS:** In the base case, DRSP-EE was found to be the most cost-effective strategy. DRSP-EE cost $688 compared to $766 for NA-EE, $736 for transdermal N-EE, and $729 for NO-EE to prevent a single pregnancy per patient per year. No contraceptive use was the least cost-effective strategy, resulting in approximately $52,529 to prevent a single pregnancy per patient per year. Monte Carlo sensitivity analysis confirmed these findings. Incremental cost-effectiveness analyses revealed that the use of transdermal N-EE costs an additional $86,285 per patient per year to be as effective as DRSP-EE. **CONCLUSION:** In terms of cost-effectiveness, DRSP-EE dominated all contraceptive strategies. The overarching component driving differences in cost-effectiveness was related to direct medical costs associated with pregnancy. These direct medical costs, in turn, were driven by differential compliance and efficacy rates that favored DRSP-EE.

PIH4

THE DIRECT AND INDIRECT COST BURDEN OF TREATED UTERINE FIBROIDS

Lee DW[1], Ozminkowski RJ[2], Smith Carls G[3], Wang S[4], Gibson TB[2], Stewart EA[5]
[1]GE Health care, Waukesha, WI, USA, [2]Thomson Medstat, Ann Arbor, MI, USA, [3]Thomson Medstat, Brooklyn, NY, USA, [4]Thomson-Medstat, Cambridge, MA, USA, [5]Brigham and Womens Hospital, Boston, MA, USA

OBJECTIVES: Estimate annual direct (medical expenditure) and indirect (absenteeism and short-term disability) costs for women with uterine fibroids (UF). **METHODS:** We compared 12-month direct costs among women aged 18–54 with clinically-significant, symptomatic UF (admission, emergency visit, or >2 office visits >30 days apart with a UF diagnosis) to a 1 : 1 propensity score matched cohort of women without UF, using the MarketScan Commercial Claims and Encounters insurance database data from for 2000–2004. We also compared indirect costs for the sub-sample of women with available data. Exponential conditional regression analysis controlled for confounding factors, and costs were adjusted to 2004 levels. **RESULTS:** Sample sizes for the direct and indirect costs analyses were 38,020 and 1820, respectively. Mean 12-month direct costs for women in the UF group were $11,720 vs. $3257 for controls (women without diagnosed or treated fibroids). Mean 12-month indirect costs were $11,752 and $8083 for women in the UF group and controls, respectively. Estimated direct costs attributable to UF were therefore $8463 ($p < 0.001$) and indirect costs were $3669 ($p < 0.001$). Employers' share of direct costs ranged from 84.1% to 87.5%. **CONCLUSION:** Direct and indirect costs of uterine fibroids represent a substantial burden to employers. Treatment options aimed at reducing symptoms and resultant absenteeism are needed to improve women's health and productivity.

PIH5

SURGICAL COST OF PELVIC ORGAN PROLAPSE IN GERMANY, FRANCE AND ENGLAND

Subramanian D[1], Slack M[2]
[1]Ethicon, Livingston, Scotland, UK, [2]Addenbrookes Hospital, University of Cambridge Teaching Hospitals Trust, Cambridge, UK

OBJECTIVES: To estimate the direct cost of surgical interventions for Pelvic Organ Prolapse (POP) to the payers in Germany, France and the National Health Service (NHS) in England.